Medicaid Issues —

MEDICAID REIMBURSEMENT OF INPATIENT HOSPITAL SERVICES

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Issue Statement

North Carolina Medicaid expenditures for inpatient hospital services were $486 million in FY92, representing approximately one-fourth of the total Medicaid budget. Because inpatient hospital care is the largest Medicaid program area, reimbursement for these services is a primary target for payment reform. However, analysis of reimbursement policy modifications should not be limited to options which create a one-time cost reduction in expenditures. Rather, analysis of alternative reimbursement systems should address the following additional concerns:

- Promotion of cost efficiency
- Establishment of appropriate payment at levels related to the costs of efficient and well-managed facilities
- Access to quality care
- Program expenditure growth which is at an acceptable level
- Continued compliance with applicable federal and state guidelines, standards and other requirements

Background

North Carolina Medicaid expenditures for inpatient hospital services increased over 150 percent between 1987 and 1992. (See Exhibit 1.) However, the number of recipients increased 115 percent over the same time period. Consequently, increases in the cost per recipient have been marginal over the past several years.

Inpatient hospital services are reimbursed prospectively, based on hospital-specific 1981 base year costs. The maximum rate per day a facility may receive is the eightieth percentile of all facilities' per diem costs. Per diem rates include both operating and capital costs. Psychiatric facilities are reimbursed at a rate equal to the statewide median cost per day. Additional payments are made to disproportionate share hospitals, which are facilities that serve a large share of Medicaid or indigent patients.

The North Carolina hospital industry faces significant problems. With the exception of certain hospitals in urban areas, occupancy rates throughout the State are low. Several facilities have occupancy rates below 50 percent. (See Exhibit 2.) Low occupancy rates are a sign of an inefficient market, as hospitals look to revenues from filled beds to cover all fixed costs. However, North Carolina is a predominantly rural state; therefore, some excess capacity may be necessary in order to ensure access throughout the State. The hospital industry faces another problem in that Medicaid is not the only payor attempting to

EXHIBIT 1

NORTH CAROLINA MEDICAID PROGRAM 1987-1992
INPATIENT HOSPITAL SERVICES EXPENDITURES

Fiscal Year	Payments	Percent Increase (Decrease)	Recipients	Percent Increase (Decrease)	$ Per Recipient	Percent Increase (Decrease)
1987	$189,224,702.21		83,833		$2,257.16	
1988	$218,261,880.85	15.35	89,947	7.29	$2,426.56	7.50
1989	$286,256,013.22	31.15	115,741	28.68	$2,473.25	1.92
1990	$339,230,664.77	18.51	131,809	13.88	$2,573.65	4.06
1991	$402,113,809.13	18.54	154,844	17.48	$2,596.90	0.90
1992	$485,856,059.93	20.83	181,013	16.90	$2,684.09	3.36
1987-1992		156.76		115.92		18.91

Source: Division of Medical Assistance

EXHIBIT 2

NORTH CAROLINA HOSPITAL OCCUPANCY RATES - FY91

Occupancy Level (%)	Number of Hospitals
90-100	2
80-89	10
70-79	11
60-69	23
50-59	19
40-49	22
30-39	17
20-29	12
Less than 20	9

Source: Division of Medical Assistance

control health care expenditures. More than any other time, other payors are seeking ways to control health care costs.

The Omnibus Reconciliation Act of 1980 gave states greater flexibility in establishing Medicaid reimbursement policies. However, Congress was concerned that adequate payment levels be maintained to ensure access to care. Therefore, the Boren amendment to the Social Security Act was enacted to address the standard against which reimbursement was to be measured. The Boren amendment requires that states develop reimbursement rates which are "reasonable and adequate to meet costs which must be incurred by efficiently and economically operated facilities." Enacted during 1981, this provision intended to allow public payors flexibility to design cost containment incentives within provider reimbursement programs. However, courts have interpreted the legislation to require states to meet certain minimum payment levels. Hospitals have filed Boren amendment lawsuits in 22 states, alleging that Medicaid payment rates are inadequate to meet the costs of economically and efficiently operated facilities.

Findings

Finding 1: ***North Carolina Medicaid expenditures for inpatient hospital services are comparable to other states; however, average length of stay is among the highest in the country.***

North Carolina Medicaid payments for inpatient hospital services were equal to 76 percent of facilities' allowable costs in FY91. However, when disproportionate share payments are included, Medicaid payments covered 94 percent of facilities' costs. The American Hospital Association reports the national average Medicaid hospital reimbursement as 78 percent of costs. It is important to make a distinction between the definition of an economic and efficient facility and "allowable costs." Because a cost is allowed does not necessarily mean it is one which would be incurred by an "economic and efficient facility."

Analysis of states' Medicaid payment data seems to indicate that North Carolina expenditures compare favorably to those of other states. As indicated in Exhibit 3, expenditures per discharge are below the national average and the Region IV average. Similarly, expenditures per recipient are below the national average. (See Exhibit 4.) The average length of stay in North Carolina of 5.6 days, although equal to the national average, places it among the top fifteen states in the country. (See Exhibit 5.)

EXHIBIT 3

AVERAGE MEDICAID EXPENDITURES PER DISCHARGE

	1989	1990	Percent Change
Tennessee	$1,824.08	$1,318.64	-27.7
HCFA Region IV	$2,585.27	$2,482.70	4.0
Virginia	$2,812.09	$2,953.36	5.0
South Carolina	$2,754.10	$3,492.67	26.8
North Carolina	$3,393.19	$3,580.07	5.5
National Average	$4,351.77	$4,268.32	-1.9

Source: Health Care Financing Administration, Report on State Medicaid Expenditures

EXHIBIT 4

AVERAGE MEDICAID EXPENDITURES PER RECIPIENT FOR INPATIENT HOSPITAL SERVICES

	1989	1990	Percent Change
Georgia	$2,081	$4,709	126.3%
Florida	3,145	3,854	22.5
Region IV Average	$2,262	3,137	38.7
Virginia	2,742	2,975	8.5
North Carolina	2,637	2,754	4.4
West Virginia	2,836	2,751	-3.0
Kentucky	2,279	2,696	18.3
Tennessee	1,775	2,318	30.6
Alabama	1,836	2,297	25.1
South Carolina	1,606	2,070	28.9
Mississippi	1,635	2,008	22.8
National Average	3,272	3,695	12.9

Source: Health Care Financing Administration, Report on State Medicaid Expenditures

EXHIBIT 5

AVERAGE LENGTH OF STAY FOR MEDICAID RECIPIENTS

	1989	1990	Percent Change
Tennessee	4.18	3.13	-25.1
HCFA Region IV	5.20	4.57	-12.1
Virginia	5.33	5.23	-1.9
South Carolina	6.18	5.6	-9.4
North Carolina	5.94	5.70	-4.0
National Average	5.84	5.90	1.0

Source: Health Care Financing Administration, Report on State Medicaid Expenditures

Finding 2: While North Carolina's reimbursement system exerts some cost control, other systems more effectively control costs and encourage appropriate utilization.

While comparison of State Medicaid payment data indicates that average payments in North Carolina are below national averages, North Carolina should evaluate the ability of alternative methodologies to encourage facilities to operate efficiently and control expenditure growth. One reason for the relative effectiveness of the current system is the fact that, for over ten years, rates have been updated by inflation factors, and not by actual changes in facility costs. However, based on Peat Marwick's findings in other states, it is possible that payments are not being made equitably, as rates do not reflect changes in hospitals' costs which may have occurred over the past ten years. Hospitals continue to be reimbursed based on cost patterns in place in 1981.

North Carolina pays for inpatient hospital services on a facility-specific, per diem basis. Although the system is easily understood by providers and requires little maintenance by State staff, there are shortcomings associated with systems which pay hospitals a flat fee for each day of care provided. Because hospitals receive payment for each day of care provided, there is no incentive to control length of stay. Additionally, the payment amount does not address the type or intensity of care provided to patients; facilities receive the same rate per day whether patient care needs are minimal or intensive.

In recent years, several states have moved away from this type of system, toward systems which link payment rates to the resources used to provide particular types of care. Exhibit 6 indicates that 21 states have developed methodologies which establish rates according to diagnosis-related groups (DRGs). Under a DRG-based system, each case is assigned to a DRG by DRG Grouper software, which categorizes inpatient hospital claims into groups which reflect similar resource consumption. The assigned DRG is then multiplied by a base rate in order to determine the payment rate. Because DRG-based systems establish payment rates which reflect resources necessary to provide care, payments are distributed more equitably.

Base rates are often established through the use of peer groups. Peer grouping places facilities into categories based on characteristics which are demonstrated to affect costs. For example, facility location (urban versus rural) is often a criteria used to establish peer groups. By establishing separate base rates for each peer group, the system is able to more effectively control costs.

Some states, however, have opted to establish facility-specific base rates. Although the majority of states use peer grouped base rates, the use of facility-specific base rates avoids the need to make additional adjustments such as separate payment for indirect teaching costs. The decision of how many base rates should be calculated is both a policy decision

EXHIBIT 6

STATE DEVELOPMENTS IN HOSPITAL REIMBURSEMENT
STATE MEDICAID REIMBURSEMENT METHODOLOGIES (1985-1991)

Reimbursement System	1985 No. of States	1991 No. of States
Cost-based	15	9
Prospective		
Facility-specific	15	10
Peer-grouped	7	6
DRG-based	9	21
Global/Negotiated	4	5

Source: Prospective Payment Assessment Commission, 1991 Report

and an analytical decision. It is a policy decision because the number of base rates that are developed will drive:

- The cost containment incentives within the system
- The potential equity of the system
- The number of adjustments that may need to be built into the system

Another available alternative is the establishment of a statewide base rate. Multiple base rates, such as peer grouped and hospital-specific rates, should only be developed if cost per discharge is statistically different across facilities or proposed peer groups. For example, recent studies have determined that for some state Medicaid programs, urban/rural, teaching status and status as a sole community provider have proven valid predictors of cost differences per discharge among facilities. Once these distinguishing characteristics have been identified, statistically tested and refined, various payment scenarios can be modeled and compared.

Finding 3: North Carolina's reimbursement system has controlled payments for capital-related costs and medical education costs.

A hospital's capital-related costs include depreciation expense for buildings and fixtures, moveable equipment such as high technology medical equipment, interest expense associated with loans to acquire depreciable assets, insurance on depreciable assets, the cost of improvements to buildings and fixtures, debt financing or refinancing where depreciable assets are used as collateral, and lease expenses where property is, in effect, purchased. Typically, a hospital's capital related costs account for approximately 7 to 9 percent of a hospital's total budget (operating and capital budgets).

Capital costs, by nature, differ from operating costs. This nature causes difficulties in incorporating these costs into a prospective payment system. Capital expenditures are generally obligated over long periods of time and may reflect decisions made several years earlier under different sets of circumstances. Moreover, capital investment patterns vary significantly among hospitals, reflecting an institution's past resources and access to capital markets.

North Carolina Medicaid reimburses facilities for capital costs on a facility-specific, prospective basis. Payment amounts are based on facilities' 1981 capital costs. Facilities which have incurred substantial changes in their capital cost structure may appeal for modification of their base rate. Because capital rates have not been rebased since 1981, North Carolina generally controlled Medicaid expenditures for capital-related costs. However, a shortcoming of the system may be that it rewards some facilities for inefficient performance. Facilities with inefficient levels of capital costs in 1981 continue to be reimbursed for these inefficiencies. Conversely, facilities with low capital costs in 1981 are, in effect, penalized for their previous efficiency.

The North Carolina Medicaid program reimburses hospitals for medical and nursing education according to each facility's base year operating costs for these services. This methodology is highly effective in its ability to control costs.

Exhibit 7 presents a comparison of North Carolina's Medicaid inpatient hospital reimbursement policies to those of other states in the southeastern region, including comparisons of methodologies for the payment of capital and medical education costs.

Finding 4: North Carolina does not negotiate with providers to obtain better rates in areas of the State where competition among hospitals exists.

Selective contracting is an innovative form of reimbursement which is designed to encourage provision of care in efficient and cost-effective facilities. Selective contracting is a method of establishing payment rates through the use of a competitive bidding process. In this approach, the hospitals serve as contractors to the Medicaid program for the provision of services. This process may be used to set reimbursement rates regardless of the underlying form of payment (per diem, DRG or hybrid system), and it may be used to determine all-inclusive inpatient and/or outpatient rates, or it may be applied to select services only, such as neonatal intensive care units services.

Under a selective contracting system, the State acts as a prudent buyer of services, and generally selects only those facilities which offer the most cost-effective arrangements for services. The State must also ensure that quality of care is maintained, and that Medicaid recipients have appropriate access to care. Because Medicaid recipients' freedom of choice is restricted, a Freedom of Choice waiver must be obtained from the federal Health Care Financing Administration.

Within the competitive bid approach, two major variations have been implemented in other states. The most common approach is to select designated providers based on a selective contracting approach. All hospitals within a geographic area are encouraged to submit a bid; generally, the lowest bids are accepted to the point at which the number of providers selected ensures access to care for all recipients in a given geographic area. All other hospitals in the area are excluded from receiving Medicaid reimbursement for specified, non-emergency types of care. In some cases, it is not the lowest bid that is selected. Based on quality of care concerns selection could be made based on using Medicare's and private insurers policies which favor the hospitals that perform a high volume of a specific service.

The second approach, which was used in the Illinois Medicaid program, involves contracting with most hospitals in a contracting region, but limits the number of service units (in Illinois, this is days of care) for which the more expensive providers are reimbursed. The primary objective of this approach is to force the more routine cases requiring less complicated care out of the expensive, tertiary care hospitals, into less

EXHIBIT 7

COMPARISON OF STATE REIMBURSEMENT METHODOLOGIES FOR INPATIENT HOSPITAL SERVICES

	North Carolina	Alabama	Florida	Georgia	Kentucky
Payment Methodology	Prospective; state-operated: cost-based	Non-rural: prospective; rural: cost-based	Prospective	Prospective	Prospective
Payment Unit	Per diem	Per diem	Per diem	Per case	Per diem
Standard for Rate Determination	Hospital-specific with cost ceilings at eightieth percentile of all facilities' arrayed costs; psychiatric reimbursed statewide median cost	Non-rural: peer grouped ceilings at eightieth percentile	Hospital-specific county revenue ceilings; exempted facilities include teaching, children's, rural and psychiatric hospitals	Hospital-specific	Hospital-specific; 120 percent of peer-grouped median costs establish ceilings
Classification and Relative Weights	N/A	N/A	N/A	N/A	N/A

EXHIBIT 7 (Continued)

COMPARISON OF STATE REIMBURSEMENT METHODOLOGIES FOR INPATIENT HOSPITAL SERVICES

	North Carolina	Alabama	Florida	Georgia	Kentucky
Base Year	1981, unless rebased through appeals process	Previous year	Previous year	Governor and general assembly decide whether to rebase; rebasing has occurred annually in recent years	Most recent cost report
Update/ Inflation Factor	Inflation and HCFA update	DRI National and Southern Marketbasket Index	Southern Marketbasket Index	DRI National Marketbasket	DRI National Marketbasket
Capital Cost Reimbursement	Prospective; included in base year rate	Non-rural: passed through with occupancy adjustment	Included in per diem rates		Capital and related costs subject to 75 percent minimum occupancy factor
Medical Education Cost Reimbursement	Prospective; included in base year rate	Direct costs passed through	Included in per diem rates		Teaching/Non-teaching peer groups
Service Limits	None	Fourteen days/year	Forty-five days per year	None	Fourteen days/year

EXHIBIT 7 (Continued)

COMPARISON OF STATE REIMBURSEMENT METHODOLOGIES FOR INPATIENT HOSPITAL SERVICES

	North Carolina	Alabama	Florida	Georgia	Kentucky
Medicaid Cost Coverage, 1989	78%	84%	82%	72%	85%
Expenditures per Patient Day, 1990	HCFA: $628 DMA: $419	$632	$656	N/A	N/A
Expenditures per Discharge, 1990	HCFA: $3,580 DMA: $2,346	$2,626	$3,926	N/A	N/A
Expenditures per recipient, 1990	$2,754	$2,297	$3,857	$4,708	$2,696
Average Length of Stay, 1990	5.70	4.16	5.98	N/A	N/A

EXHIBIT 7 (Continued)

COMPARISON OF STATE REIMBURSEMENT METHODOLOGIES FOR INPATIENT HOSPITAL SERVICES

	North Carolina	Mississippi	South Carolina	Tennessee	Virginia
Payment Methodology	Prospective; state-operated: cost	Prospective	Prospective	Prospective	Prospective
Payment Unit	Per diem	Per diem	Per discharge and per case	Per diem	Per diem
Standard for Rate Determination	Hospital-specific with cost ceilings at eightieth percentile of all facilities' arrayed costs; psychiatric reimbursed statewide median cost	Hospital-specific; ceilings set at eightieth percentile of each peer group's arrayed costs	Hospital per discharge rates for most frequently occurring DRGs; hospital-specific per diem rates for less common procedures	Hospital-specific	Hospital-specific; ceiling are calculated at peer grouped 1982 median costs
Classification and Relative Weights	N/A	N/A	Medicare grouper and South Carolina relative weights	N/A	N/A

EXHIBIT 7 (Continued)

COMPARISON OF STATE REIMBURSEMENT METHODOLOGIES FOR INPATIENT HOSPITAL SERVICES

	North Carolina	Mississippi	South Carolina	Tennessee	Virginia
Base Year	1981, unless rebased through appeals process	Most recent cost report	1987	1988	Previous year
Update/ Inflation Factor	Inflation and HCFA update	DRI Regional Marketbasket	HCFA update for non-PPS hospitals	ProPAC Update	Virginia-specific DRI
Capital Cost Reimbursement	Prospective	Capital costs paid as part of all-inclusive rate; payments subject to occupancy adjustments	Eighty-five percent of allowable costs	Cost	Cost
Medical Education Cost Reimbursement		Education costs paid as part of all-inclusive rate	Eighty-five percent of allowable costs	Cost	Cost
Service Limits	None	Thirty days/year	None	Reimbursement for operating costs limited to sixty percent of rate after twenty days	Twenty-one per admission

EXHIBIT 7 (Continued)

COMPARISON OF STATE REIMBURSEMENT METHODOLOGIES FOR INPATIENT HOSPITAL SERVICES

	North Carolina	Mississippi	South Carolina	Tennessee	Virginia
Medicaid Cost Coverage, 1989	78%	93%	69%	93%	77%
Expenditures per Patient Day, 1990	HCFA: $628 DMA: $419	$551	$592	$421	$565
Expenditures per Discharge, 1990	HCFA: $3,580 DMA: $2,346	$1,396	$3,493	$1,319	$2,953
Expenditures per recipient, 1990	$2,754	$2,008	$2,070	$2,318	$2,975
Average Length of Stay, 1990	5.70	2.53	5.9	3.13	5.23

Sources:
- Commerce Clearing House
- Medicare/Medicaid Guide
- Prospective Payment Assessment Commission 1989
- Health Care Financing Administration

expensive community hospitals. Adopting this approach is therefore recommended only in areas in which excess utilization occurs or high intensity settings exist. This approach offers the advantages of being more politically acceptable to hospitals and less disruptive of established patterns of care. However, the approach is more complex to implement and administer, and requires extensive utilization monitoring by both hospitals and the State.

Finding 5: Overall costs per inpatient stay in North Carolina hospitals are high in comparison to other southeastern states.

Although the Medicaid program reimburses hospitals based on a prospective rate, and has achieved some degree of control over payments, it is important to examine inpatient hospital costs in the State because all other payors are affected by increasing costs. In addition, to the extent that Medicaid payments remain relatively fixed, but costs continue to increase, the costs not reimbursed by Medicaid are shifted to other payors. Finally, hospitals (and the courts) evaluate the equity of a state's reimbursement policies based on the percentage of costs covered. As the percentage of cost coverage declines, the inadequacy of Medicaid payment is blamed; however, the increase in costs must be considered in the equation.

Between 1985 and 1991, North Carolina's hospital cost per day has increased the greatest of all states in the Southeastern Atlantic states (with the exception of Delaware, which is classified in this region by the American Hospital Association). In 1985, North Carolina's average cost per day was $330.00. In 1991, the average cost per day had increased by 66.5 percent, or $219 a day to $549. Although the 1991 cost per day is less than six other states in the region, the increase costs have out-paced all states in the region and the average per day inpatient hospital cost for the United States. Exhibit 8 provides further information on cost per day.

The average cost per stay in North Carolina has increased at a greater rate than all Southeastern Atlantic states over the last six years. The average cost per hospital stay in North Carolina jumped from $2,294 in 1985 to $4,032 in 1991, a 75.8 percent increase. For all states in the region, the average increase was 59.7 percent, and was 53.1 percent for all hospitals in the United States. Exhibit 9 provides more information regarding cost per stay.

The highest increase in cost per day and cost per stay in North Carolina occur in the larger metropolitan areas, specifically:

- Charlotte-Gastonia-Rock Hill
- Greensboro-Winston
- Raleigh-Durham

EXHIBIT 8

COMPARISON OF HOSPITAL INPATIENT COSTS PER DAY IN SOUTHEAST REGION AND UNITED STATES (1985-1991)

	1985	1991	Percent Change
Delaware	388.68	712.81	83.4
D.C.	581.00	844.49	45.3
Florida	440.36	717.60	62.9
Georgia	349.27	577.08	65.2
Maryland	395.33	623.75	57.8
North Carolina	330.00	549.44	66.5
South Carolina	327.77	533.60	62.8
Virginia	357.55	588.74	64.7
West Virginia	343.82	533.83	55.3
Region	384.88	624.73	62.3
U.S.	411.00	636.93	54.9

Source: American Hospital Association, 1985, 1991

EXHIBIT 9

COMPARISON OF HOSPITAL INPATIENT COSTS PER STAY IN SOUTHEAST REGION AND UNITED STATES (1985-1991)

	1985	1991	Percent Change
Delaware	3,034.75	4,852.83	59.9
D.C.	4,674.81	6,600.12	41.2
Florida	3,095.74	4,968.11	60.5
Georgia	2,280.00	3,719.97	71.9
Maryland	3,052.13	4,279.88	40.2
North Carolina	2,294.30	4,032.32	75.8
South Carolina	2,340.41	3,732.49	56.1
Virginia	2,640.44	4,054.11	53.5
West Virginia	2,299.94	3,612.16	57.3
Region	2,727.40	4,355.84	59.7
U.S.	2,995.38	4,587.87	53.1

Source: American Hospital Association, 1985, 1991

For example, the average cost per stay in the Raleigh-Durham area increased over 209 percent from 1985 to 1991, as compared with the average cost per stay nationwide, increased by 53 percent. Hospital costs in the Charlotte-Gastonia-Rock Hill area increased by 90 percent from 1985 to 1991.

The decrease in the number of hospital beds in North Carolina's metropolitan areas have been less than the national average; in the Raleigh-Durham area, there was no significant decrease in hospital beds, even though their occupancy rate dropped 2.5 percent between 1985 and 1991. Exhibit 10 provides further information on costs and length of stays in these geographic areas.

Recommendations

Recommendation 1: Implement a DRG-based reimbursement system which uses peer groups to establish base payment amounts.

A DRG-based system distributes payments according to the resources necessary to provide care to Medicaid patients. Hospitals are given incentives to control expenditures by ensuring appropriate utilization of hospital services. Reimbursement on the basis of discharges controls average length of stay. The State may also choose to implement per diem payments for certain cases if there is insufficient volume to create stable DRG weights.

Implementation of the DRG system would occur with selection of a new base year. Peer-grouped based DRG rates will redistribute payments to providers. Capital payment could be based on Medicare's prospective rates.

Implications:

- Appropriate utilization of hospital services is encouraged.
- Facilities are provided incentives to operate efficiently.
- Facilities are reimbursed based on the relative resources necessary to provide particular types of care.
- Average length of stay will be reduced. Upon subsequent rebasing, the State can achieve savings through this reduction.

EXHIBIT 10

SELECTED INFORMATION ON NORTH CAROLINA'S METROPOLITAN AREAS

	Average Cost Per Stay		
	1985	1991	Percent Change
Metropolitan Area	2,591.14	4,685	80.1
Charlotte	2,228.04	4,347	95.1
Greensboro	2,350.47	4,340	84.7
Raleigh-Durham	1,974.87	6,116	209.7

	Occupancy		
	1985	1991	Percent Change
Metropolitan Area	73.9	75.0	1.3
Charlotte	64.2	73.4	14.3
Greensboro	76.1	77.6	2.0
Raleigh-Durham	79.2	77.2	-2.5

	Average Length Of Stay		
	1985	1991	Percent Change
Metropolitan Area	7.2	7.3	1.3
Charlotte	6.8	7.1	4.4
Greensboro	7.3	7.5	2.7
Raleigh-Durham	8.1	7.7	-4.9

	Average Cost Per Day		
	1985	1991	Percent Change
Metropolitan Area	360.20	641.7	78.2
Charlotte	325.16	618.4	90.2
Greensboro	324.34	581.4	79.2
Raleigh-Durham	477.62	805.30	68.6

Source: American Hospital Association, 1985, 1991

Recommendation 2: Implement selective contracting programs in geographically feasible regions of the State.

The State may consider selective contracting programs for areas where competition among hospitals exists. For example, a program may be feasible in Durham, Charlotte and Raleigh.

Where competition among hospitals exists, North Carolina Medicaid should negotiate with facilities in order to obtain better rates. In addition, the Medicaid program should develop mechanisms which encourage physicians to send recipients to these low-cost facilities wherever possible. A selective contracting system would encourage facilities to operate efficiently and reduce Medicaid expenditures for inpatient hospital services.

Implications:

- Utilization of low-cost facilities is encouraged.
- Hospitals are provided incentives to operate efficiently, and to compete on the basis of costs.
- The provision of care is moved to the most cost-effective and efficient hospitals.
- Medicaid expenditures can be reduced.
- Legal challenges to payment rates can be minimized since hospitals negotiate and agree upon payment rates.

Recommendation 3: Implement a global budgeting approach to hospital reimbursement on a pilot basis in one area of the State.

The purpose of global budgeting would be to develop a methodology that allows a budgetary determination to be made for each facility that is related to the function of the facility. The allocation should reasonably contain volume growth, but provide enough resources to allow the facility to meet its service goals and maintain financial stability.

Global budgeting would limit the total level of reimbursement for services to a particular entity. Hospitals, clinics or other institutions would be given an annual operating budget to cover all or a portion of services projected to be purchased by Medicaid within a given time-frame. Annual operating budgets would be based on last year's budget adjusted for current inflationary trends. Each hospital would be responsible for allocating resources so that total expenditures remain within these budget constraints. Under a global budgeting system, the acquisition and reimbursement of equipment and high technology, as well as

capital improvements, would require approval of a consortium comprised of participating hospitals' board of directors.

Global budgeting differs from itemized budgeting as used for Medical inpatient reimbursement. Under Medicare's inpatient prospective payment system, a hospital receives a previously fixed amount for each diagnosis related group (DRG). The hospital still relies on volume to generate income. Dependence on volume production no longer exists under global budgeting because the facility receives a single prospective budget for all its activities. Variables such as demand for health care and case-mix become parameters that are factors into the global budgeting process.

Internationally, several entities employ global budgeting to control the costs of hospital care. The most recent example in the United States is the Rochester Hospital Experimental Program (HEP) in New York.

HEP controlled costs by limiting total hospital revenue increases to the rate of inflation. At the program's initiation, each hospital received a prospectively determined, fixed budget. Overall, HEP was effective in controlling costs and improving the financial performance of hospitals. During its operation, Rochester hospitals experienced cost increases below the average increases for the State of New York and the United States as a whole. In 1979, the year before the program went into effect, the average cost increase for Rochester area hospitals was 8 percent, significantly below the average cost increase for the entire country of 13 percent. In 1980, the first year the program was in effect, Rochester area hospital costs increased 9 percent in comparison to 17 percent for the entire United States. Between 1980 and 1984, Rochester area costs increases were only 65 percent as great as those for the entire country. In 1980, expenditures per capita for RAHC hospitals were approximately 80 percent of other New York State hospitals and decreased to 71 percent by 1986 (Sutor, 1989). In addition to controlling costs, Rochester area hospitals were also able to improve their financial condition, showing a cumulative operating profit of $11.9 million from 1980 through 1984.

Global budgeting can be a powerful tool to control the introduction and diffusion of new technology. Requests and operating budgets for new programs and technologies must be approved or they are not eligible for reimbursement. Centralized planning and the need to gain approval are effective in restricting both the number and the spread of new, high technology programs and procedures.

Recently, Vermont legislature has enacted legislation which requires the newly created Health Care Authority to establish target expenditures for the following year's health care costs (FY94) and to develop a global budgeting strategy for the consecutive year's reimbursement of inpatient and outpatient hospital, nursing home costs and ancillary medical services.

- This approach, although demonstrated to be effective in controlling of costs, is viewed as a radical approach to health care reform.

- A demonstration waiver from HCFA would be required to implement this approach because the system would be on all-payor approach, and both Medicare and Medicaid payments would be affected.

- While Medicaid payment per day would likely increase; total inpatient expenditures, as well as other payor's payments, could decrease, resulting in decreased cost of insurance coverage. This is a positive feature for employees concerned about the cost of health insurance.

- Private insurors, e.g., Blue Cross of North Carolina, would have to agree to participate.

- Occupancy rates would continue to decrease; the viability of hospitals with excess occupancy could be threatened.

- The impact on teaching hospitals must be assessed.

- Significant start-up time is needed.

Cost Savings

Exhibit 11 presents estimates of cost savings associated with implementation of a DRG-based reimbursement system and a selective contracting program. Savings are based on a projected annual growth equal to the average growth in North Carolina expenditures per recipient between FY87 and FY92. Initial years savings for implementing changes in hospital inpatient reimbursement methodology will total $12.6 million. Cumulative savings of $189 million would occur over a ten year period.

The cost reduction implications of global budgeting are significant; however, planning and implementation would require about two years. Savings estimates are dependent upon the areas in which the pilot would be implemented.

Implementation Considerations

Implementation of a reimbursement system based on DRGs will require several administrative changes, including modifications of the following:

- Billing forms
- State regulations
- Provider manuals

- Medicaid State Plan (must be submitted to the Health Care Financing Administration)
- Utilization review activities
- Medicaid Management Information System (MMIS)

Additionally, North Carolina should conduct analyses to evaluate the impact of the new reimbursement methodology on particular types of hospitals, particularly its rural hospitals. The State must also analyze data to ensure its compliance with the Boren amendment, which requires states to provide assurances to HCFA that the reimbursement methodology covers the costs which must be incurred by economic and efficiently operated facilities.

EXHIBIT 11

PROJECTED COST SAVINGS (In Millions)

	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Expenditures	$126.2	$130.7	$135.3	$140.1	$145.1	$150.2	$155.6	$161.1	$166.8	$172.7
Implement DRG/Peer Group system	$2.5	$6.5	$6.8	$7.0	$7.3	$7.5	$7.8	$8.1	$8.3	$8.6
Implement Selective Contract System	$10.1	$10.5	$10.8	$11.2	$11.6	$12.0	$12.4	$12.9	$13.3	$13.8
Revised Budget	$113.6	$113.7	$117.7	$121.9	$126.2	$130.7	$135.4	$140.2	$145.1	$150.3
Total Savings Per Year	$12.6	$17.0	$17.6	$18.2	$18.9	$19.5	$20.2	$20.9	$21.7	$22.5
Cumulative Savings	$12.6	$29.6	$47.2	$65.4	$84.3	$103.8	$124.0	$144.9	$166.6	$189.1

Assumptions:
- Projected inflation 3.5 percent equal to average increase in payment per recipient between FY87 an FY92
- Savings from implementing DRG/Peer Group system estimated at two percent; assumes budget-neutral rebasing, use of peer groups and some statewide rates; prospective capital reimbursement (based on savings experienced in other states)
- Savings from selective contracting estimated at eight percent (based on research and evaluation of selective contracting in other states)

2.27